# Montana Laboratory Sentinel

Updates from the MT Laboratory Services Bureau
800-821-7284 www.lab.hhs.mt.gov
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## World AIDS Day 2010

***MMWR* November 26, 2010 / 59(46);1509**

World AIDS Day (December 1) draws attention to the human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) epidemic worldwide. In the United States, approximately 56,000 persons become infected with HIV each year. The National HIV/AIDS Strategy calls for 1) educating all persons in the United States about the continued risk for HIV, 2) implementing intensive, combined HIV-prevention programs in communities with high HIV prevalence, 3) ensuring access to services, and 4) reducing HIV-related health disparities (*1*).

Globally, at the beginning of 2003, approximately 50,000 persons were receiving antiretroviral therapy (ART) in sub-Saharan Africa, where the need for such therapy was greatest (*2*). Currently, through the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and a partnership among many organizations, approximately 5 million persons receive ART in low-income and middle-income countries (*3*). Building on these successes, CDC focuses on strengthening systems and capacities of ministries of health to implement sustainable, evidence-based prevention, care, and treatment services. CDC also is working with its partners to ensure cost-effective programming and efficient implementation through increased technical assistance to multiple countries. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5946a1.htm?s_cid=mm5946a1_e

To ensure access to HIV testing services, the MTPHL offers HIV – 1/2 Plus O Antibody by EIA with reflex confirmation via Western Blot (or HIV-1/HIV-2 Multispot Rapid Test when HIV I Western Blot is indeterminate) and oversees a Quality Assurance Program for local community based organizations and public health departments that perform rapid HIV screening. If you have testing questions, please contact MTPHL (800) 821-7284 or DPHHS STD Section at (406) 444-3565.

## Congratulations!

*To the following Laboratory Services Members!!!*

*Kathy Martinka, Laboratory Bioterrorism Coordinator, will be retiring effective December 13, 2010*

*Denise Higgins, Newborn Screening and Serology Supervisor, will be starting in her new position as Family and Community Health Bureau Chief on December 6, 2010*

*Nahara Borja, Laboratory QA and Safety Coordinator, began a new position as an epidemiologist in the Diabetes Program.*

*We wish you all well in your future endeavors! You will be missed!!!*

**Mortality Among Patients with Tuberculosis and Associations with HIV Status --- United States, 1993--2008**

***MMWR* November 26, 2010 / 59(46);1509-1513**

Worldwide, tuberculosis (TB) incidence increased from 125 cases per 100,000 population in 1990 to 142 cases per 100,000 population in 2004, primarily because of the human immunodeficiency virus (HIV) epidemic (*1*). Persons with HIV are at increased risk for TB disease, and those with TB have a high risk for death. This is documented most clearly in resource-limited settings, where limited access to antiretroviral therapy (ART) and other health-care services contribute to the elevated mortality (*1*). The impact of HIV on patients with TB is less clear in resource-rich nations such as the United States.
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5946a2.htm?s_cid=mm5946a2_e

**MTPHL To Expand TB Molecular Testing:** CDC's 2009 *Updated Guidelines for the Use of Nucleic Acid Amplification Tests in the Diagnosis of Tuberculosis* state that Nucleic Acid Amplification Testing (NAAT) should become standard practice for patients suspected to have TB, and all clinicians and public health tuberculosis programs should have access to NAA testing for tuberculosis to shorten the time needed to diagnose it from 1-2 weeks to 1-2 days.

The Montana Public Health Laboratory (MTPHL) currently offers NAAT for the detection of tuberculosis and has recently been awarded short term funding to expand this service. In a joint proposal with the Wyoming Public Health Laboratory, MTPHL will purchase instrumentation for molecular testing for *M. tuberculosis*, including Rifampin resistance, the same day the specimen is received, at a reduced fee through June 2011. In addition, the states of Montana, North Dakota, South Dakota and Wyoming have agreed to collaborate on the development of an educational campaign to increase the understanding of the importance of TB NAA testing in our state and promote the appropriate use.

# MT Communicable Disease Update Week 43 Ending 10/30/10 and Week 44 Ending 11/6/10

**This newsletter is produced by the Montana Communicable Disease Epidemiology Program.**
**Questions regarding its content should be directed to 406.444.0273 (24/7/365).**
**http://cdepi.hhs.mt.gov**

***NOTE: The CDEpi Program apologizes for sending this update out in the old format. We have temporarily lost our ability to update our web pages. Future CD updates should return to the newer format again soon.***

**Release date 11/18/2010**

## DISEASE INFORMATION

**Summary – MMWR Week 43 - Ending 10/30/10** – Disease reports received at DPHHS during the reporting period October 24th through October 30th, 2010 included the following:

- Vaccine Preventable Diseases: Pertussis (1), Varicella (3)
- Invasive Disease: *Streptococcus pneumonia*e (1)
- Enteric Diseases: Campylobacteriosis (1), Giardiasis (3), Salmonellosis (2)
- Other Conditions: Creutzfeldt-Jakob Disease (1)
- Animal Rabies: (0)
- Travel Related Conditions: (0)

**Summary – MMWR Week 44 - Ending 11/06/10** – Disease reports received at DPHHS during the reporting period October 31st through November 6th, 2010 included the following:

- Vaccine Preventable Diseases: Pertussis (4), Varicella (4)
- Invasive Disease: *Streptococcus pneumonia*e (1)
- Enteric Diseases: Campylobacteriosis (2), Cryptosporidiosis (2), Giardiasis (2)
- Other Conditions: (0)
- Animal Rabies: (0)
- Travel Related Conditions: (0)

*NOTE: The attached report has multiple pages reflecting the following information: (1) vaccine preventable and enteric diseases YTD; (2) other communicable diseases YTD; (3) cases just this past reporting week; (4) clusters and outbreaks; and (5) an STD summary.*

## THE "BUZZ"

**Pertussis –** Increased pertussis activity is continuing in Montana and precautions must be emphasized. To prevent the spread of pertussis, health care professionals should:

- Make sure patients of all ages are up to date with recommended pertussis vaccines (***DTaP*** for infants/children and ***Tdap*** for adolescents/adults. For immunization schedules visit: http://www.cdc.gov/vaccines/recs/schedules/default.htm
- Consider the diagnosis of pertussis in patients with long duration cough or post-tussive vomiting, and close contacts. The diagnosis of pertussis is often delayed or missed. In the youngest infants, atypical presentation is common – the cough may be minimal or absent and the illness may present as apnea, hypoxia, or seizures.
- When testing for pertussis, use the correct tests: http://www.aphl.org/aphlprograms/infectious/Documents/Pertussis_Brochure-Final3.pdf
- Treat appropriately for pertussis. Because pertussis may progress rapidly in young infants, treat suspected and confirmed cases promptly: Treatment guidelines can be found by visiting: http://www.cdc.gov/pertussis/clinical/treatment.html
- Quickly report cases of pertussis to your local health department for assistance with prevention measures.

### *Pertussis surveillance case definition*

#### *Clinical Description*

A cough illness lasting at least 2 weeks with one of the following: paroxysms of coughing, inspiratory "whoop," or post-tussive vomiting, without other apparent cause (as reported by a health professional)

#### *Laboratory Criteria for Diagnosis*

- *Isolation of* Bordetella pertussis *from clinical specimen*
- *Polymerase chain reaction (PCR) positive for pertussis*

**Influenza Season 2010-11** – As of November 18, 2010, two cases of seasonal type A/H3 influenza were confirmed by the MT Public Health Laboratory. Both cases were reported from Gallatin County. One was in an adult male and one in an adult female. Both had a history of travel outside of Montana during the incubation period and experienced Illness onset during return trips to Montana. These cases were not related and neither person had received the influenza vaccine this season.

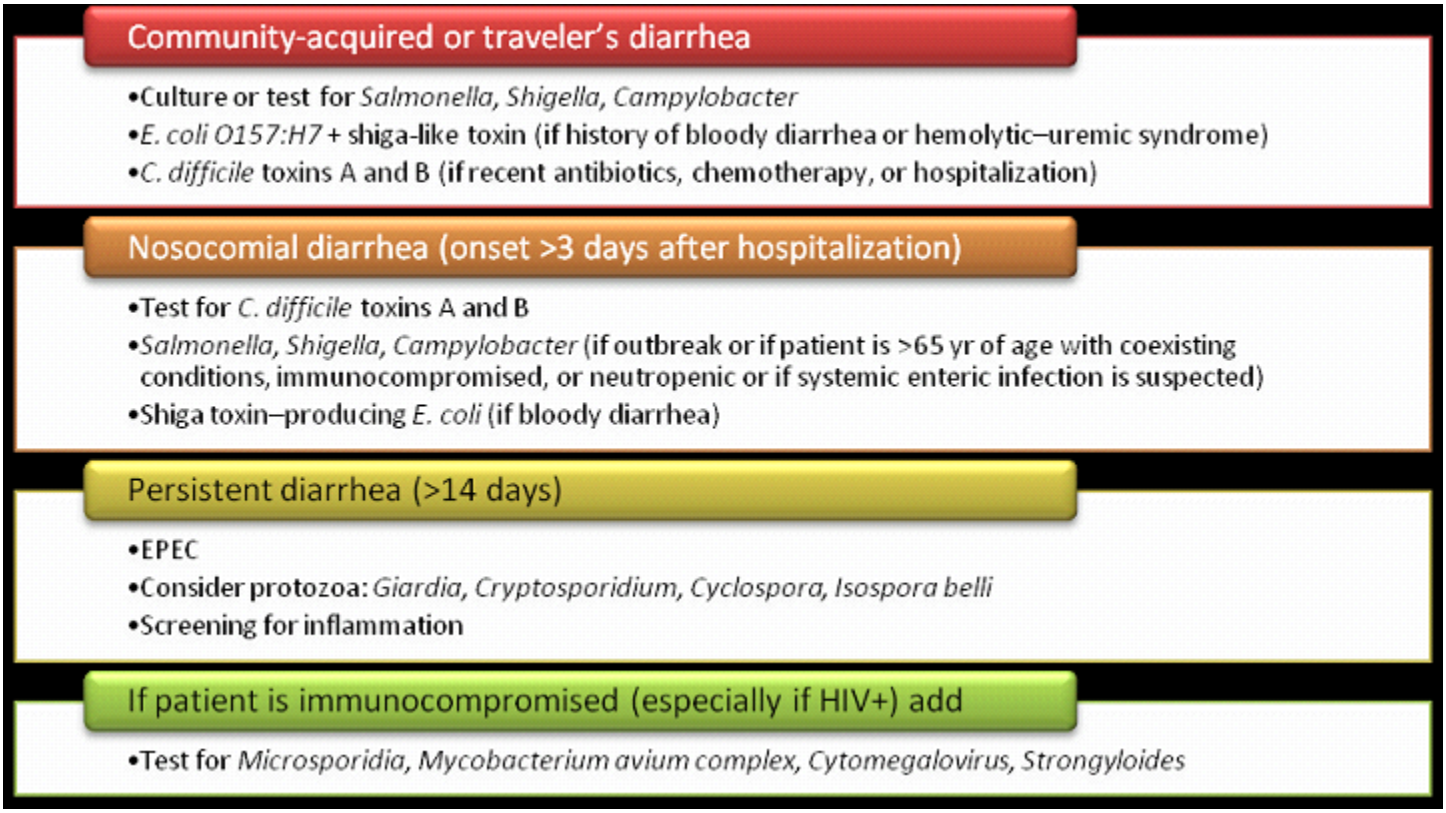
Influenza vaccination is the most effective method for preventing illness from influenza virus infection and avoiding influenza complications. However, during most years, illness caused by the influenza virus and associated complications occur, creating logistical challenges for public health professionals. For information on current influenza vaccine recommendations and tools to

assist in diagnostics, surveillance, school absenteeism reporting, and additional control and prevention measures, please visit: http://www.dphhs.mt.gov/PHSD/epidemiology/cdepi-influenza.shtml

**Diarrheal Illness –** Diarrheal illness can be caused by a variety of infectious microorganisms including bacteria, viruses, and protozoa. These can be transmitted through contaminated food or water, direct contact with an ill person, or direct contact with some animals that may carry human disease causing organisms in their intestinal tracts. Symptoms caused by the various enteric pathogens may vary only subtly making diagnostics challenging. The following chart taken from the "World Gastroenterology Organization practice guideline: March 2008", can serve as a guide to testing for enteric pathogens depending on a patient's history. The complete guideline, and the "Practice guidelines for the Management of Infectious Diarrhea" published by the Infectious Disease Society of America, can be found by visiting: http://www.dphhs.mt.gov/PHSD/epidemiology/documents/WGOPracticeGuidelinesforAcuteDiarrhea2008.pdf or http://www.dphhs.mt.gov/PHSD/epidemiology/documents/IDSAGuidelinesforMgmtDiarrhea2001.pdf respectively.

For information on food safety and the role of safe food handling practices in preventing infectious diarrheal illness, visit: http://www.dphhs.mt.gov/PHSD/prevention_opps/pdf/MPHNov2010.pdf to view the November edition of "Montana Public Health Prevention Opportunities Under the Big Sky."

Incubation periods and likely causes of diarrhea (Figure 8 from the World Gastroenterology Organization practice guideline: March 2008).




**INFORMATION / ANNOUNCEMENTS**

**Get Smart About Antibiotics Week** - During November 15-21, 2010, the third annual Get Smart About Antibiotics Week will be observed. The purpose of this observance is to educate the public and health care providers about the importance of appropriate antibiotic use in the prevention of antimicrobial resistance. The CDC's Get Smart About Antibiotics Campaign has two message targets: the public and, new in 2010, messages and resources for improving antibiotic use in healthcare settings. Posters appropriate for providers' offices are available from the Montana Antimicrobial Resistance Program -- call 444-0273 to order. (http://www.cdc.gov/getsmart/campaign-materials/print-materials/Poster-Caucasian-color-508.pdf)

For CDEpi staff contact information and duties, please visit: http://www.dphhs.mt.gov/PHSD/Communicable-disease/documents/CDEpiStaffListOctober2010.pdf